

What is claimed is:

[Claim 1] An orbital implant device adapted for fitting into a patient's orbit, said orbit having a medial side, a temporal side, a posterior side, an anterior side, a superior side, and an inferior side, all with reference to the implant's position in the patient's orbit, said implant device comprising:

an implant having an anterior portion and a posterior portion, said implant having a medial side, a temporal side, a superior side, and an inferior side, all said sides corresponding to the respective sides of the patient's orbit; the anterior portion of the implant having a finite number of tunnels adapted for receiving sutures and for receiving bodily fluids and in growing tissue, and a finite number of chimneys adapted for receiving bodily fluids and in growing tissue; and the implant having a quasi-spherical shape defined by an elongation of the implant toward the medial side of the posterior portion.

[Claim 2] The orbital implant of claim 1 wherein the elongation is off center with respect to the anterior portion.

[Claim 3] The orbital implant of claim 1 further comprising an astigmatism toward the anterior portion of the implant which is defined by the medial and temporal sides being more anterior and the superior and inferior sides being more posterior.

[Claim 4] The orbital implant of claim 1 further comprising an astigmatism toward the anterior portion of the implant which is defined by a radius which is longer toward the medial and temporal sides of the implant, and which is shorter toward the superior and inferior sides of the implant.

[Claim 5] The orbital implant device of claim 3 wherein the implant device is made of a polymer.

[Claim 6] The orbital implant device of claim 5 wherein the polymer is acrylic.

[Claim 7] The orbital implant device of claim 6 wherein the anterior portion is adapted to be combined with the posterior portion when the two portions are aligned in a proper configuration.

[Claim 8] The orbital implant device of claim 7 wherein the anterior portion and posterior portion are combined using ultrasonic welding.

[Claim 9] The orbital implant device of claim 3 wherein the implant device is made of an elastomer polymer.

[Claim 10] The orbital implant device of claim 9 wherein the elastomer polymer is silicone.

[Claim 11] The orbital implant device of claim 10 wherein the anterior portion further comprises at least two tentacles which serve to combine the anterior portion with the posterior portion, said tentacles having an enlarged portion; and

the posterior portion having holes adapted to receive the tentacles and the enlarged portion of the tentacles.

[Claim 12] The orbital implant device of claim 1 wherein the anterior portion further comprises valleys and mounds which are adapted for keying with a prosthetic eye.

[Claim 13] The orbital implant device of claim 1 wherein there are at least four tunnels which are adapted for receiving sutures and for receiving bodily fluids and in growing tissue.

[Claim 14] The orbital implant device of claim 1 wherein there are at least fourteen chimneys.

[Claim 15] The orbital implant device of claim 1 wherein there are not more than sixteen chimneys.

[Claim 16] The orbital implant device of claim 1 further comprising a visible marking on the medial side of the implant.

[Claim 17] The orbital implant device of claim 1 in which the anterior portion and posterior portion are formed as a single piece.

- [Claim 18] The orbital implant device of claim 1 in which the anterior portion and posterior portion are formed as two separate pieces.
- [Claim 19] The orbital implant device of claim 1 wherein the posterior portion further comprises a finite number of chimneys adapted for receiving bodily fluids and in growing tissue.